

LIST OF PRIOR ART CITED BY  
APPLICANT  
(PTO-1449)

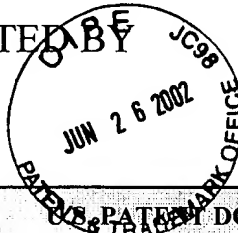
ATTY. DOCKET NO.  
FSU-0004

APPLN. SERIAL NO.  
09/909,992

APPLICANT(S)  
Susan Davis ALLEN

FILING DATE  
July 23, 2001

GROUP  
2881



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PATENT DOCUMENTS

EXAMINER'S INITIALS	*PATENT NO.	*ISSUE DATE	*INVENTOR NAME	CLASS	SUBCLASS	FILING DATE
COPY	4,987,286	1/22/91	ALLEN	219	121.68	

FOREIGN PATENT DOCUMENTS

EXAMINER'S INITIALS	PATENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
						Yes	No

OTHER ART (Including Author, Title, Date, Pertinent Pages, Publisher, Place of Publication, Etc.)

SW	A	S.D. Allen, J.O. Porteus and W.N. Faith, Infrared laser-induced desorption of H <sub>2</sub> O and hydrocarbons from optical surfaces, Appl. Phys. Lett. Vol. 41(5), pp. 416-418 (1982)
SW	B	S.D. Allen, J.O. Porteus, W.N. Faith, and J.B. Franck, Contaminant and defect analysis of optical surfaces by infrared laser induced desorption, Appl. Phys. Lett. Vol. 45(9), pp. 997-999 (1984)
KW	C	J.O. Porteus, J.B. Franck, S.C. Seitel and S.D. Allen, Defect characteristics of optical surfaces using pulsed laser damage methods, Optical Engineering Vol. 25, No. 10, pp. 1171-1176 (1986)
SW	D	W. Zapka, W. Ziemlich and A.C. Tam, Efficient pulsed laser removal of 0.2µm sized particles from a solid surface, Appl. Phys. Lett. Vol. 58 (20), pp. 2217-2219 (1991)
SW	E	M. Genut, B. Livshits, Y. Uziel, O.Tehar-Zahav, E. Iskevitch, I. Barzilay, Laser removal of foreign materials from semiconductor wafers, Proc. SPIE Vol. 3274, pp. 90-99 (1998)
SW	F	D. Yogev, M. Engel, S. Zeid, I. Barzilay, and B. Livshits, Laser chemical process for clean applications in semiconductor manufacturing, Proc. SPIE 3933, pp. 77-87 (2000)
SW	G	J.D. Kelley, M.I. Stuff, F.E. Hovis and G.J. Linford, Removal of small particles from surfaces by pulsed laser irradiation: observations and a mechanism, Proc. SPIE 1415, pp. 211-219 (1991)
SW	H	Y.F. Lu, W.D. Song, C.K. Tee, D. S-H. Chan, and T.S. Low, Wavelength effects in the laser cleaning process, Jpn. J. Appl. Phys. Vol. 37, pp. 840-844 (1998)
SW	I	V. Dobler, R. Oltra, J.P. Boquillon, M. Mosbacher, J. Boneberg and P. Leiderer, Surface acceleration during dry laser cleaning of silicon, Appl. Phys. A 69, pp. S335-S339 (1999)
SW	J	M. She, Dongsik Kim and C.P. Grigoropoulos, Liquid-assisted pulsed laser cleaning using near-infrared and ultraviolet radiation, J. Appl. Phys. Vol. 86, No. 11, pp. 6519-6524 (1999)
SW	K	A. Miller, S.J. Lee, S.D. Allen, Laser assisted particle removal "dry" cleaning of critical surfaces, Mater. Sci. Eng. B49, pp. 85-88 (1997) <i>Author sketched</i>
SW	L	C.T. Avedisian, The Homogeneous Nucleation of Limits of Liquids, J. Phys. Chem. Ref. Data Vol. 14, No. 3, pp. 695-729 (1985)
SW	M	O. Yavas, P. Leiderer, H.K. Park, C.P. Grigoropoulos, C.C. Poon, W.P. Leung, N. Do and A.C. Tam, Optical Reflectance and Scattering Studies of Nucleation and Growth of Bubbles at a Liquid-Solid Interface Induced by Pulsed Laser Heating, Phys. Rev. Lett., Vol. 70, No. 12, pp. 1830-1833 (1993) *
SW	N	A.C. Tam, H.K. Park and C.P. Grigoropoulos, Laser Cleaning of Surface Contaminants, Appl. Surf. Sci. 127-129, pp. 721-725 (1998)
COPY	O	J.B. Heroux, S. Boughaba, I. Ressejac, E. Saehar and M. Meunier, CO <sub>2</sub> laser-assisted removal of submission particles from solid surfaces, J. Appl. Phys. 79(6), pp. 2857-2862 (1996)
SW	P	M. Mosbacher, H-J. Munzer, J. Zimmermann, J. Solis, J. Boneberg & P. Leiderer, Optical field enhancement effects in laser-assisted particle removal, Appl. Phys. A 72, pp. 41-44 (2001)

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OTHER ART (Including Author, Title, Date, Pertinent Pages, Publisher, Place of Publication, Etc.)

Q	D.R. Halfpenny and D.M. Kaner, A quantitative analysis of single pulse ultraviolet dry laser cleaning, J. Appl. Phys. Vol. 86, No. 12, pp. 6641-6646 (1999)
R	J.B. Heroux, S. Boughaba, I. Ressejac, E. Sacher and M. Meunier, J. Appl. Phys. 79, p. 2857 (1996)
S	X. Wu, E. Sacher and M. Meunier, The modeling of eximer laser particle removal from hydrophilic silicon surfaces, J. Appl. Phys. Vol. 87, No. 8, pp. 3618-3627 (2000)
G	G. Vereecke, E. Rohr and M.M. Heyns, Laser-assisted removal of particles on silicon wafers, J. Appl. Phys. Vol. 85, No. 7, pp. 3837-3843 (1999)
U	Y.F. Lu, Y.W. Zheng, W.D. Song, An energy approach to the modelling of particle removal by pulsed laser irradiation, Appl. Phys. A 68, pp. 569-572 (1999)
V	K. Mann, B. Wolff-Rottke and F. Muller, Cleaning of optical surfaces by eximer laser radiation, Appl. Surf. Sci. 96-98, pp. 463-468 (1996)
W	J. Adler, R.K. Sin, Y. Rabinovich and B. Moudgil, J. Coll. In (2000)
X	C. Canuto, M.Y. Hussaini, M.Y. Quarteroni, Spectral methods in fluid dynamics, Springer Series in Computational Physics, Springer-Verlag, New York (1988)
Y	Q. Chen, H.W. Lee, S. Allen, Bubble formation and growth in liquid encapsulated laser vapor deposition, Proceedings of the 2nd annual Louisiana Aerospace Forum, 113 (1994)
Z	A.C. Engelsberg, Transition from laboratory to manufacturing for a dry, laser-assisted cleaning technology, SPIE Vol. 3274, pp. 100-109 (1998)
AA	R.G. Horn, and D.T. Smith, Contact Electrification and Adhesion Between Dissimilar Materials, Science Vol. 256, pp. 362-364 (1992)
BB	M.Y. Hussaini, P. Rasetarinera, An efficient implicit discontinuous spectral Galerkin method, Journal of Computational Physics Vol. 172, pp. 718-738 (2001) 1st Author switched
CC	K. Imen, S.D. Allen, S. Lee, Laser assisted microscale particle removal, Appl. Phys. Lett. 58(2), pp. 203-205 (1991)
DD	J.N. Israelachvili, Intermolecular and Surfaces Forces, Academic Press, London 1992
EE	S.J. Lee, K. Imen, S.D. Allen, CO <sub>2</sub> Laser assisted particle removal threshold measurements, Appl. Phys. Lett. 61(19), pp. 2314-2316 (1992)
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GG	S.J. Lee, S.D. Allen, S. Miller, Materials Science and Engineering B 49, p. 85 (1997)
HH	P.T. Leung, N. Do, Leander Klees, W.P. Leung, Frank Tong, L. Lam, W. Zapka and A.C. Tam, Transmission studies of explosive vaporization of a transparent liquid film on an opaque solid surface induced by excimer-laser-pulsed irradiation, J. Appl. Phys. 72 (6), pp. 2256-2263 (1992)
II	Y.K. Lu, W.D. Song, K.D. Ye, Y.P. Lee, D.S.H. Chan and T.S. Low, A cleaning model for removal of particles due to laser-induced thermal expansion of substrate surface, Jpn. J. Appl. Phys. Vol. 36, pp. L1304-L1306 (1997)
JJ	Y.K. Lu, W.D. Song, Y. Zhang, M.H. Hong, T.S. Low, A theoretical model for laser removal of particles from solid surfaces, Applied Physics A 65, pp. 9-13 (1997)

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KK	Y.K. Lu, Y.W. Zheng, and W.D. Song, Laser induced removal of spherical particles from silicon wafers, J.Appl. Phys. Vol 87, No. 3, pp. 1534-1539 (2000)
LL	M. Meunier, J.B. Heroux, S. Boughaba, E. Sacher, CO <sub>2</sub> laser assisted removal of sub micron particles from solid surface, J. Appl. Phys. 79 (6), pp. 2857-2862 (1996)
MM	M. Mosbacher, N. Chaoui, J. Siegel, V. Dobler, J. Solis, J. Boneberg, C.N. Afonso, P. Liederer, A comparison of ns and ps steam laser cleaning of Si surfaces, Appl. Phys. A 69, pp. S331-S334 (1999)
NN	M. Mosbacher, V. Dobler, J. Boneberg, P. Liederer, Universal threshold for the steam laser cleaning of submicron spherical particles from silicon, Appl. Phys. A70, pp. 669-672 (2000)
<del>MISS</del>	<del>K.L. Mittal, Particles on surfaces Vol. 1-6, Plenum Press New York (1988-1998)</del>
PP	H.K. Park, C.P. Grigoropoulos, W.P. Leung, A.C. Tam, A practical excimer laser-based cleaning tool for removal of surface contaminants, IEEE Transactions on Components, Packaging and Manufacturing Technology - Part A, Vol. 17, No. 4, pp. 631-643 (1994)
QQ	N.W. Pu, J. Bokor, S. Jeong, R. Zhao, Nondestructive ps-ultrasonic characterization of Mo/Si extreme UV multiplayer reflection coatings, J. Vac. Sci. Technol. B17 (6), pp. 3014-3523 (1999)
RR	A.C. Tam, W.P. Leung, W. Zapka, W. Ziemlich, Laser-cleaning techniques for removal of surface particles, J. Appl. Phys. 71 (7), pp. 3515-3523 (1992)
SS	O. Yavas, A. Schilling, J. Bischof, J. Boneberg, P. Leiderer, Bubble nucleation and pressure generation during laser cleaning of surfaces, Appl. Phys. A, 64, pp. 331-339 (1997)
TT	S. Miller, Dusty Lab May Revolutionize LEDs, Photonics Technology World, p. 34, September 2000

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